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Proceedings of the Pennsylvania Environmental Council, Inc.

Harrisburg, Pennsylvania, January 25, 1978

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PROCEEDINGS OF THE HAZARDOUS WASTE MANAGEMENT SEMINAR

The Pennsylvania Environmental Council, Inc.

MORNING SESSION

Speeches

Curtin Winsor, Esq., President, Pennsylvania Environmental Council, Inc. This is the third time in the past two years that the Pennsylvania Environmental Council, Inc. (PEC) has sponsored a discussion of hazardous waste management problems. The first two conferences on hazardous waste, held in 1976, dealt with the nature, extent, and possible solutions to hazardous waste management problems. This seminar focuses on the impact of the new Federal Resource Conservation and Recovery Act (RCRA), P.L. 94-580 on hazardous waste management in Pennsylvania.

Irving Hand, PEC Director and Chairman of the Seminar. Our discussion here today should focus on what those in power will do to deal with problems of hazardous waste management. We have with us this morning three panelists, who will each speak briefly about RCRA. When the speakers have finished their remarks, they will answer questions from the floor.

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The speakers are: William Middendorf, Deputy Secretary, Bureau of Environmental Protection, Pennsylvania Department of Environmental Resources (DER); William Philipbar, President, Rollins Environmental Services; and A. Blakeman Early, Legislative Director, Environmental Action, Inc.

Remarks of William Middendorf. My talk will focus on three areas. First, what is the nature of the hazardous waste problem in Pennsylvania? That is, what is the volume of hazardous wastes generated here? Second, what has been done so far in Pennsylvania to deal with the problem? Third, what can Pennsylvania do in the future with the hazardous waste problem?

Pennsylvania is a highly industrialized state with approximately 20,000 manufacturing plants generating every type of waste. The U.S. Environmental Protection Agency (EPA) estimated recently that three million tons of hazardous wastes are generated annually in this state, and this places Pennsylvania in the top three generators of hazardous wastes in the country. Only Texas and California generate more.

Hazardous wastes are generated by industrial processes, including: textile dying, agricultural chemicals manufacturing, petroleum refining, steel manufacturing, paint production, energy production, and glass and leather manufacturing. The worst hazardous waste problems result from three of these manufacturing processess: agricultural chemical production, petroleum refining, and steel manufacturing.

To date, the hazardous wastes generated in Pennsylvania have been handled through long-term storage, landfill (some illegal landfills have been used), contract haulers, out-of-state disposal, and ocean disposal. Each of these methods of disposal has caused some environmental problems at one time, either fish kills, water pollution, or acute health problems. These methods have also resulted in longer-term environmental problems including ground water pollution, leaching of chemicals into residential wells, restriction of fisheries, pesticide disposal problems, PCB problems, metals in sewage sludge, and accumulated health problems from lead and cadmium.

The public has been outraged by these problems. People wonder how government could have allowed the problem to reach such crisis proportions. Citizens want the problem to be solved, but generally do not want hazardous waste disposal sites to be located in their neighborhoods. There have been especially vehement objections to proposals for dumping Philadelphia sludge in other areas of the state. The public feels that agricultural use of sewage sludge is not safe, which makes that disposal option difficult. Objections to the use of sludge to reclaim stripped mines have also been voiced. Sludge is a major form of waste, perhaps the single biggest waste disposal problem.

Pennsylvania has made efforts to solve the problems of waste disposal since 1966. In 1967, a staff of twenty-five was assigned to this area. The Pennsylvania Solid Waste Management Act (Act of July 31, 1968, Act No. 241, Pa. Laws 788) provided for planning at the local level. A solid waste survey, done in 1968, indicated that 100 million tons of solid wastes were generated in Pennsylvania each year, and that 11 million tons of this waste were generated from industrial and agricultural activities. One million tons of this was classified as hazardous wastes. This figure is several years old, and I believe EPA's figures reflect the present situation more accurately.

From 1967 to 1971, the emphasis was on solid waste management planning. In 1970 through 1975, emphasis was placed on municipal and community solid waste facilities. In 1976, Pennsylvania received a grant from EPA that enabled the state to explore the need for a hazardous waste management program. Other areas that have received attention are personnel training, alleviating serious problems caused by inadequate handling of hazardous wastes, planning for location of disposal sites, penalty assignments, and monitoring and coordination with other agencies, such as the Pennsylvania Department of Transportation.

DER believes that a larger staff and a bigger budget are needed to ensure that the hazardous waste program is effective. The state also needs adequate rules and regulations, an inventory of hazardous waste sources and practices, adequate emergency procedures, further training of industry personnel, emergency disposal sites, public acceptance of disposal methods, and source reduction and resource recovery.

I feel that DER needs at least 60 new staff positions, and an additional $1.5 to $2.0 million a year to administer the hazardous waste management program. The Pennsylvania Solid Waste Management Act needs to be amended to increase criminal and civil penalties for violations. A manifest system, that tracks hazardous wastes from manufacture through final disposal, is needed. Legislation authorizing this system is essential.

There are some advantages to state, rather than Federal involvement in this area. First, it was the intent of Congress that the states be involved. Second, DER is already required to regulate solid waste through the Pennsylvania Solid Waste Management Act. Most solid waste sites also take in hazardous wastes. Coordination between the hazardous waste and solid waste programs will be possible if DER handles them both. In addition, DER has a knowledgeable staff, and there is already a good enforcement program in place in Pennsylvania. An informal survey of Pennsylvania industries shows that industry would vastly prefer a state-administered program of hazardous waste management to one managed by the Federal Government. Industry does not want to deal with two different levels of government in this issue.

DER, along with other states that are members of the National Governor's Association, has been monitoring EPA's proposed hazardous waste regulations. DER has moved toward interim primacy in the hazardous waste program. The final decision on accepting full primacy, however, will depend upon the content of the proposed EPA regulations, the adequacy and continuity of Federal financial assistance, and legislative and public support.

Remarks of William Philipbar. The Federal Resource Conservation and Recovery Act of 1976 (RCRA) requires closer cooperation between the public and private sectors than any other environmental legislation to date.

The hazardous waste management industry has a long way to go before it will be able to dispose of wastes in an environmentally safe way. There are presently too few disposal sites trying to deal with too much waste. There are only 20 sites outside of California that can adequately treat hazardous wastes. These are mainly chemical landfills with no pre- or post-treatment capabilities, or recovery abilities. There are fewer than 10 adequate analytical laboratories associated with hazardous waste treatment facilities.

Why is the industry in this shape? Clearly, because prior to the passage of RCRA, there was no demand, because there were no regulations forcing industries to dispose of their wastes properly. The economics of waste disposal are unfavorable. This Act will force proper disposal of hazardous wastes. The result will be a major increase in the cost of disposing wastes, as proper methods of disposal are naturally more costly than improper disposal has been.

Another problem is that waste disposal is a tough business. There are few trained people. The industry has a bad image as a result of a few "night riders" who dump waste material into sewers. It is a capital-intense and a high-risk business.

RCRA will affect the hazardous waste management industry. I believe that the industry will come to be dominated by medium to large size firms. The Act will force favorable economics by fostering more personnel training and better technology. This will result in fewer adverse environmental effects.

RCRA will also have an effect on the industries that generate the wastes. These industries will try to reduce the amount of wastes they produce, and will move toward more off-site disposal and treatment of wastes in order to reduce their potential liability.

EPA is working on regulations to implement this Act. These regulations will be out in final form in the spring of 1979. They will set out requirements for disposal sites, and identify materials that cannot be land-filled. The regulations will describe the manifest system, which is intended to track wastes from production through disposal. This system worked well in other states.

The regulations will also establish responsibility for financing post-closure care of disposal sites. Under the proposed regulations, an estimate of the cost of such care will be made and the owner and operator of the landfill will be required to accumulate a pool of money that will be used to administer the landfill after closure. An indemnity fund would also be established in case the landfill causes environmental problems. The fund for post-closure care must be large enough so that the interest on the fund will cover the costs of administering the site after closure. Insurance for post-closure will be necessary. Land used for disposal could be transferred to the state and Federal Government to administer 10 or 15 years after closure, with the costs of administration being met by the fund described above. Wisconsin has adopted this approach.

Remarks by A. Blakeman Early. This conference is addressing the second and very crucial stage of the implementation of the hazardous waste management provisions of RCRA--the state assumption of regulatory authority. This legislation interjects the Federal regulatory hand into one of the last bastions of the environment which has heretofore been regulated, if at all, through state and local statute and ordinance land disposal. There is little doubt that the Federal regulatory hand is thrust into the arena of land disposing hazardous wastes with a capital R.

While the provision of guidance and technical assistance is certainly going to play a major role in ensuring proper implementation of the hazardous waste provisions, this statute is derived from the new breed of environmental legislation that demands that a big stick not only be carried, but used when necessary. Citizen involvement is crucial to ensuring that hazardous waste requirements are enforced when necessary.

I urge citizens to become involved in the implementation of these hazardous waste management requirements at the earliest stages of state assumption of responsibility. I also urge citizens to get involved with the implementation at the Federal level, too. This involvement must focus on various aspects of the process as well as substantative environmental issues. Here are some of areas where I feel that involvement is most important.

A major area which is crucial to the implementation process and which all too often is an afterthought to most citizens involved in the environmental movement, is the question of the budget for implementation programs. Based on my experience with EPA in Washington, the effects of an inadequate budget on the effectiveness of a regulatory program can be devastating.

The budget has an impact on all phases of implementation, substantive, procedural, and administrative. This issue cannot be underestimated because states have been notoriously stingy in funding adequate solid waste programs in the past and the prospect of Federal support for this legislation can be described in no other terms but bleak. Indeed, the lack of budget for the Federal solid waste program will have a profound impact on the state programs as well.

First, let's review the present status of EPA's solid waste budget. Although the hazardous waste program is faring better than others, the Office of Solid Waste received an increase of only five persons of the 153 additional persons requested for Fiscal Year 1978. It received an increase of $8.7 million of a total of $143 million requested. Rather obviously, EPA must take steps to deal with the dramatic disparity between what is required under the Act, and the resources it has been given to meet these requirements.

There are two basic responses EPA can take in order to ameliorate this disparity: it can seek to define the hazardous waste problem, and thus its responsibilities, as narrowly as possible, or it can seek to minimize Federal involvement by encouraging state and local assumption of responsibilities.

I prepare to reserve judgment as to whether EPA has succumbed to the temptation to narrowly interpret its mandate. Quite clearly, the Agency is promoting the state assumption of program responsibilities. This effort is a basic part of the strategy document recently circulated by EPA for comment.

I raise the budget issue in relation to state delegation, not because I feel that state assumption of the regulatory functions in hazardous waste management is undesirable. Certainly, the policy of RCRA encourages this approach and those closest to the hazardous waste management problems should be best suited to solve them. However, I do fear that due to the Federal budget problem, EPA may become too enthusiastic to rid itself of its responsibilities. Thus, the question of whether a state has a program "equivalent" to the Federal one for purposes of delegation may become one of whether it can do a better job than the meager resources that EPA can provide would do, rather than whether the state program is equivalent to the one described in the statute and truly adequate to protect public health and the environment.

Ensuring the adequacy of state programs is made additionally more difficult because of the significant changes made in RCRA from the "standard" language for delegating authority such as is found in the Clean Air Act and the Federal Water Pollution Control Act. First, the Administrator of the U.S. EPA must grant interim authorization to a state that applies and demonstrates its program to be "substantially equivalent" to the Federal program. No public hearing is required prior to submission or approval.

Second, permanent authorization of a state program becomes essentially automatic after state application unless EPA takes two steps. Within 90 days of the state application EPA must find that the state is not expected to receive EPA approval and within 180 days after that, EPA must find that the state program is either not equivalent to the Federal program, or with programs in other states or that the state program does not provide adequate enforcement. If EPA fails to make either of these findings, the second of which it cannot be compelled to make, the state automatically receives authorization. EPA has a major incentive not to make these findings because of its own inadequate manpower and inadequate funds. Therefore, it will be up to the interested citizens of Pennsylvania to ensure that the hazardous waste program submitted and approved is truly equivalent to the one described in RCRA and EPA's implementing regulations. Citizen involvement must begin at the earliest stages of state involvement and those citizens here today are to be commended for their foresight. That involvement can start by ensuring that notice and opportunity for a public hearing is required prior to state application for interim authorization.

Citizen involvement also means involvement in the critical budget area that I have so far discussed only in the context of the Federal program. However, if state officials do not have adequate budgets, they will not have adequate resources to plan an effective program at the outset, and corners will surely be cut when it comes to implementation. As I mentioned a moment ago, state solid waste budgets take on added significance when one considers that the Federal solid waste budget contains precious little money for grants in support of state programs.

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A moment ago I mentioned the need for funds to ensure proper planning. Planning is a key area in the regulatory process for citizen involvement. First, it is easy to be most effective during the formulative period of a program, rather than trying to achieve change once it is in full swing.

Second, citizen involvement in planning of hazardous waste facilities can help alleviate one of the problems of greatest concern to both Federal and state solid waste officials and which is the first substantive issue I wanted to highlight. That is the issue of land disposal facilities siting. All too often, the most ardent citizen involvement in the solid waste field has been a negative one--that of fighting the proposed location of a new solid or hazardous waste land disposal facility. Citizens have an important role to play in helping to ascertain what future disposal needs will be and helping to select where disposal facilities will be located. The proposed EPA requirements for hazardous waste facilities are the most comprehensive ever developed covering every aspect of facility construction, operation and maintenance. Yet, siting a facility remains the most important single factor in ensuring that a facility will not pose a threat to public health or the environment.

The location of a disposal facility in impermeable soils, in a well drained area that is far above underground water aquifers can do more to ensure the safety of a site than nearly any other condition. When a site is found with this rare combination of characteristics, citizens who fight such a siting on the basis of the "anywhere but near me" approach do their community a great injustice. If a land disposal facility is ultimately located at the site where no one opposes it, all too often this is the least environmentally desirable site, as well.

Such ill-considered decisions have a way of returning to haunt us in the form of polluted ground and surface waters and other environmental and health threats. Solid waste officials have frequently been burned on adverse public reaction to disposal facility siting decisions. I know at EPA in Washington, concern about this adverse public reaction is reaching the paranoid stage, resulting in the downplay of information concerning the problems that poor facility siting, construction, and operation can bring. Citizen pressure in support of sound siting decisions during the planning stage can go a long way toward ensuring that the decision is not reversed.

Another key substantive environmental issue that is intimately related to siting issues is groundwater protection. Again, citizen participation at the planning stage is crucial. This involvement must extend beyond Solid Waste Disposal Act planning. EPA is attempting to integrate the approach taken in the Safe Drinking Water Act in its regulations for hazardous waste facilities. Basically, the Safe Drinking Water Act requires each state to classify groundwater aquifers according to present or future use. Those aquifers that are classified as being suitable for drinking water supply or as a potential drinking water supply will receive greater protection than those that are classified suitable for industrial use. As currently formulated, EPA's hazardous waste facilities regulations will plug into this classification system. Disposal facilities that are located over or near an aquifer that is classified as suitable for drinking water use will have to meet more stringent requirements designed to reduce the potential that leachate might pollute that aquifer than facilities that are located over or near aquifers classified as suitable for industrial use.

Clearly, citizens have a great interest in the decision by state officials to essentially write off certain underground aquifers. The decision regarding aquifers that have already been spoiled is not difficult. Nor is the decision regarding aquifers that are presently being used as drinking water supply. The difficult decisions will surround the classifications of aquifers which are largely unused. As in the case of competing uses for a land disposal site, conflicts between competing uses for ground water aquifers are most easily resolved at the planning stage. Citizens are likely to have the greatest impact on state officials during the planning stages.

While as an environmentalist, my view is that all unused aquifers should be protected as a potential drinking water source, I think we must recognize that such an approach is not politically realistic. Therefore, this classification process must be an open one which ensures that citizens appreciate the consequences of classifying a given aquifer for a given use. As most of you know, a lot less is known about underground waters, the manner and direction of movement, and the ability to purify them once they have been polluted than is known about surface waters. The decisions classifying aquifers in the near future will have an impact for many years to come.

The last issue I would emphasize really resembles the budget and planning issues in that it concerns an aspect of the regulatory process in general, rather than a specific environmental concern in hazardous waste management. This is the citizen's suit provisions of RCRA.

As in most environmental legislation passed since 1970, RCRA provides that citizens may sue the Administrator to compel him to perform any non-discretionary act or duty. Furthermore, a citizen is given standing to sue anyone who violates any "permit, standard, regulation, condition, requirement, or order" under this Act. Citizens suits, and the threat of citizens suits, have been a crucial factor in ensuring that environmental protection laws have been properly administered and observed. I am certain that the existence of the citizen's suit provisions has been a major motivating factor behind public officials administering these laws responding to citizen in-put. In my view, state hazardous waste management authority cannot provide an "equivalent" program as required under Section 3006(b) of RCRA without a provision authorizing citizen's suits which is parallel to Section 7002.

Citizens rarely have the resources to use such a provision very frequently. Without the potential, a citizen's ability to ensure that RCRA is administered as it should be is vastly reduced.

Summation of the Morning Question and Answer Period

Tom Dale (Citizens Against Philadelphia Sludge). I would like to point out that all sludges are not the same as Mr. Middendorf implied in his speech. Some sludges, such as those from Philadelphia, contain more lead, and thus, pose more of a health problem.

Representative Ronald P. Goebel (R-Allegheny). How is mine waste being dealt with under this Act? Does this come under the heading of hazardous wastes, or is it a separate problem?

William Middendorf (Pennsylvania DER, Deputy for Environmental Protection). Mine wastes are being regulated by Pennsylvania now, and also by the Federal law on strip mining. These wastes are also covered by the Pennsylvania Solid Waste Management Act.

Representative Goebel. What will happen if DER does not get funding to administer the Act? Will the Department set priorities?

William Middendorf. Very little has been done in Pennsylvania to deal with the hazardous waste problem. Our present funding does not even enable us to keep up with the domestic waste problems. DER cannot drop other waste problems to deal just with hazardous wastes.

Representative Goebel. (Addressing Mr. Philipbar) Could you please clarify your statement about landfills being taken over by the Federal or state government?

William Philipbar (President, Rollins Environmental Services, Inc.). The regulations now being drafted by the U.S. EPA suggest that after a site has been closed (10 years or so after the closure) it could be taken over by the state. A pool of funds would be created by the owner or the operator, which would be used to care for that facility from then on.

Representative Goebel. I feel that the citizens views that they do not want a hazardous waste disposal site located in their area should receive high consideration.

A. Blakeman Early (Legislative Director, Environmental Action). The problem is not that easy to solve. The state must try to plan ahead to get citizens involved and to select sites prior to the time that people make substantial real estate investments in an area. The major problem at this time is that disposal sites are not being administered in an environmentally safe manner. Sites are being located where people have already settled. Finding safe sites is so difficult that citizens should be more willing to accept them when they are found.

Irving Hand (PEC Director and Chairman of the Seminar). Site selection is difficult, as is most land use regulation in Pennsylvania. Pennsylvania has 5,000 units of local government. Traditionally, land use responsibility has been given to local governments. A role for county government in land use is only slowly and grudgingly being given. There are still many problems of cooperation and coordination. Choices concerning location of disposal sites should be made on a regional basis.

Oliver Smith (Western Electric Company and a PEC Director). In my area of Pennsylvania, the county did plan landfill sites in undeveloped areas. The public reaction was very negative. Nothing has been done as yet, because there is a question about who has jurisdiction in this area.

Representative Samuel W. Morris (D-Chester County). May I ask what the prior speaker meant by "undeveloped land?" Was it agricultural land?

Oliver Smith. Yes, farmland.

Representative Morris. Farmland is developed.

Joseph Berne (University of Pittsburgh). As a former member of the DER staff, I know that DER has attempted to solve hazardous waste management problems in the past. Will the Resource Conservation and Recovery Act (RCRA) actually assist the state in this effort? Isn't there a problem of technological capability that the Act does not deal with?

William Middendorf. DER feels that the Act will help. It reflects a mandate of Congress--good hazardous waste management is not discretionary anymore. The technical capability of the state does need to be increased in order to deal with this problem.

William Bucciarelli (Chief, Division of Solid Waste Management, Bureau of Land Protection, Pennsylvania DER.) RCRA provides a basis for action; it attacks the management side of the problem.

Joseph Berne. This group should be aware that DER has, since 1968, been addressing the problem on a case-by-case basis but has not found any solutions.

Daniel Snyder, Esq. (Dechart, Price & Rhoads and a PEC Director). Permits from DER and possibly from EPA and some transportation agencies will be required. This will create a difficult regulatory maze. Will the private sector be willing to go through this process in order to provide services?

A. Blakeman Early. You are talking about the difficulty of obtaining a single site permit. The trend in the industry probably will not be toward the single site. The trend will be toward on-site disposal. The generator, as an employer, has political clout and if he can not get permits, he will move elsewhere.

John Schmidt (Pennsylvania Department of Environmental Resources). We are studying disposal sites in Pennsylvania for radiological material. Social barriers are also high in this area. What is the life-time of hazardous wastes? Are the wastes degradeable? Will disposal sites be limited to receiving wastes generated in Pennsylvania or will other states be able to use them as well?

William Middendorf. This last question is a legal question that may be resolved by the Supreme Court in a few weeks. (The case to which he is referring is a City of Philadelphia challenge to a New Jersey statute prohibiting importation to New Jersey of hazardous wastes from other states. The Supreme Court declared this statute unconstitutional in July, 1978. Ed. Note).

Edward Schuster (Vice President, Newco Chemical Waste System, Inc.). Will there be any facilities in Pennsylvania or will the barriers be too high? Is it possible that no sites will be approved at all? Is there any joint effort under way to handle small amounts of similar wastes produced at different sites?

William Philipbar. There was such an effort in Houston, but I don't know of one here.

Joseph Berne. There has been such an effort, near Ellswood. High cost metals would be recovered, so the economics were favorable.

Remarks of Daniel Derkics for John P. Lehman, Director, Hazardous Waste Management Division, Office of Solid Waste, U.S. Environmental Protection Agency. My job involves working with the states to obtain authorization for their hazardous waste programs. I intend to discuss here what the Federal Government expects from the states in this program, and why.

Hazardous wastes are a problem of great magnitude. The consequences of illegal disposal are serious. There have been documented cases of groundwater contamination by leachates, surface water contamination by runoff, direct contact poisoning, air pollution, damage from fires and explosions, all resulting from unacceptable disposal of hazardous wastes. Most of these incidents resulted from the open dumping of hazardous wastes on isolated tracts of land, or indiscriminate acceptance of wastes by municipal landfills regardless of the hazards involved.

In New Jersey, for example, illegal disposal of the contents of an 8,000 gallon tanker down a Newark sewer was brought to light when police caught the driver of the tanker in the act. The case was clinched when the arresting officer's shoes began to rot.

Similar incidents have happened in Pennsylvania and have been reported to the press. For example, Pennsylvania has spent $400,000 in 1971 to neutralize and dispose of the wastes of a chemical company. In this incident, several lagoons in which the chemicals were stored began to leak, and destroyed plant grounds in Bucks County. Pennsylvania spent $140,000 cleaning up chemical wastes from a tannery site in Tioga County. In 1973, 20,000 gallons of chemical wastes spilled and drained into Cowanesque River, killing all life in the river.

In another incident, an inspector from DER was splashed and burned by lye from an illegally disposed drum at a landfill in York County. In this case, the landfill had accepted a material that it was not authorized to handle.

EPA has information about more than 400 such incidents which some of the state agencies have gathered. Clearly, these same problems exist in those states which do not have environmental programs, and where the damages are not documented. Therefore, cases reported understate the magnitude of the problem. Of the 400 cases EPA has studied, 64 happened in Pennsylvania. In 54 of these 64 incidents, a specific industry could be identified as the cause: the chemical industry in 10 cases; the industrial waste processing industry in six cases; the mining industry in four incidents; the food processing industry in three cases; the petroleum industry in three cases; one case each in the agricultural, plating, tannery and public utilities industries.

The magnitude of the problem is enormous. The results of 14 EPA industry studies show that 34 million metric tons of potentially hazardous wastes were generated in 1977. By 1983, this figure will increase to 38 million metric tons. Eighty percent of this is treated on-site; 20 percent is hauled off-site for disposal contractors.

Lagooning in unlined surface impoundments represents a common method for disposing of hazardous industrial wastes. Nearly 50 percent of industrial wastes are disposed of in this way. Dumping in non-secure landfills accounts for disposal of another 30 percent. Ten percent of the wastes are disposed of by uncontrolled incineration. Thus, 90 percent of the hazardous wastes generated by 14 key industries are managed by practices inadequate for the protection of human health and the environment. By the way, Pennsylvania is the third largest generator of hazardous wastes in the United States, according to the 14 industry study.

The objectives of RCRA are simple: to protect health and the environment, to conserve material resources, and to conserve energy resources.

The Act established the Office of Solid Waste within EPA to guide the implementation of the law. It also established a Federal, state, and local government partnership to implement the Act.

The Act emphasizes: land control through regulation and control of hazardous waste disposal operations; regulation and control of hazardous wastes from "cradle to grave;" improvement in all aspects of waste management; reduction of solid wastes through resource recovery and waste reduction efforts; manpower training and public education; and research and special studies on solid waste management techniques.

Subtitle C of RCRA sets forth the "cradle to grave" approach to regulating hazardous wastes. This approach makes use of a manifest system that follows the hazardous waste from the point of its generation to its disposal. This section also sets standards for generators, transporters, and waste management facilities to ensure proper handling of the waste at each stage. The "cradle to grave" approach includes the use of a permit system for treatment, storage, and disposal facilties.

It is expected that the regulations will reduce illegal dumping, eliminate unsatisfactory facilities for waste treatment and disposal, and encourage resource recovery as waste treatment costs rise. It is also expected that the regulations will encourage generators to handle more wastes on-site. The impact on prices, jobs, and the industries involved should be minimal, except in marginal industries.

It is the intent of Congress and of EPA to make the hazardous waste management program under RCRA as much of a state-run operation as possible. The Administrator of EPA can authorize the state to operate its own program in lieu of the Federal program if certain conditions are met. States can receive one of three types of authorization: interim, full, or partial.

Interim authorization gives the states a two-year period for their existing state programs during which the states can modify existing programs to qualify for full authorization. Existing programs must be "substantially equivalent." To be "substantially equivalent," a state program must have legislative authority to control either on-site or off-site disposal of hazardous wastes, there must be a permit mechanism for

disposal facilities, there must be an active surveillance and enforcement program, and there must be an "authorization plan" which is a type of compliance plan or schedule for reaching full authorization.

To achieve full authorization, a program must be equivalent to and consistent with other programs under Subtitle C. To be equivalent, a state program must: have legislative authority to control all forms of hazardous waste management; have published regulations under this authority; have a permit mechanism for storage, treatment, and disposal facilities; have a manifest system to track wastes from origin to ultimate disposal; have adequate resources to carry out the program; identify the agency responsible for the program; and provide for public participation in accordance with EPA guidelines under Section 7004 of the Act.

Partial authorization involves a combined implementation effort of EPA and the state that meets all the requirements of full authorization. This type of authorization can only last five years (with some exceptions). It will be issued if state legislative authority is lacking for certain program components.

Federal oversight of state programs consists of quarterly state reports to EPA, EPA facilities inspections (limited to 10 percent of total facilities), and an annual program review by EPA.

An application for a state program should include a narrative description of the proposed program, a memorandum of understanding, describing oversight, and an authorization plan if it is an application for an interim program. The application should be signed by the designated state official, and submitted to the appropriate EPA regional administrator. A public hearing on the state application must be held.

Pennsylvania should consider taking over the hazardous waste management program for a number of reasons. The state is the third largest generator of hazardous wastes in the United States and borders on another large generator, Ohio. As the third largest generator, the state should receive a proportionately higher level of funds. Second, state assumption of the program is consistent with the intent of Congress. Third, the state is more familiar with its own problems, and the program will be better run in Harrisburg. Local industries and citizens would prefer to deal with Harrisburg, and control from Harrisburg will inevitably make for better public participation.

It appears that Pennsylvania's Solid Waste legislation may be eligible to receive interim authorization, which would allow two years to expand to a fully authorized program. Perfecting legislation would be needed in Pennsylvania's case for full authorization.

Summation of Question and Answer Period

(Answers were provided by Mr. Derkics)

Q: Who will pay for this waste management program?

A: Matching funds are available to the states under RCRA.

Q: Shouldn't those who generate the waste be made to help pay for the costs of regulation?

A: Under RCRA's permit system, the state could charge for the use of disposal sites. So the generator, by paying these charges, would in effect be asked to pay.

Q: Will the costs of this program be met by the fees?

A: We are not sure of this at present. It will be some time before we can know the answer to this question from experience with the program.

A general discussion on the need for source reduction as well as adequate management practices ensued. Mr. Early of Environmental Action, Inc. urged that Congress be asked to take strong action to encourage companies to reduce the amount of wastes they generate. A member of the audience questioned the availability of funds for research into good hazardous waste disposal methods. Federal and state research funds in this area are being cut back, and most of the money is being directed toward research in the area of treatment rather than source reduction as the former is the most pressing problem. Mr. Schramm, EPA's Region III Administrator, indicated that EPA is interested in source reduction and has a task force studying this issue at the present time.

AFTERNOON SESSION

Speech and Panel

Remarks by Jack Schramm, Administrator, Region III Office of the U.S. Environmental Protection Agency. Will the Resource Conservation and Recovery Act (RCRA) do the job? This is the issue we are here to discuss today. We hope that by providing input to legislators and their staff we will help them strengthen this legislation.

At 11:00 a.m. today, the Administrator of the U.S. EPA announced at a news conference that regulations will be adopted to implement the Safe Drinking Water Act. The regulations will specify certain cities that have special problems with their drinking water supplies. EPA will study water supplies in these cities to determine the extent of contamination. At present, it appears that in most cases contamination is minimal. Water supply quality problems represent the kind of environmental "time bombs" that are now being discovered frequently. Many water supply quality problems are caused by concentrations of synthetic chemicals.

EPA feels it is significant that PEC has chosen to address the topic of hazardous waste management at this time. EPA would like Pennsylvania to assume authority for administering RCRA. EPA is anxious to form a partnership with the states to implement RCRA.

Panel Participants: Lynn B. Johnson, Manager, Environmental Control, Rohm & Haas Company, Bristol; William Bucciarelli, Chief, Division of Solid Waste Management, DER; Thomas Scott, Esq., Killian & Gephart, PEC's Legislative Representative; Robert Allen, Chief, Hazardous Materials Branch, U.S. EPA, Region III; and Edward Shuster, Newco Chemical Company, Niagra Falls, New York.

Lynn Johnson, Manager, Environmental Control, Rohm & Haas, Co.

Rohm & Haas produces three kinds of wastes: degradable; non-degradables, such as inert plexiglass, a substance which is not harmful; and hazardous wastes that need to be stored for many years. These include heavy metals and arsenic. Rohm & Haas investigates sites that it may use for disposal to make sure that the wastes are properly disposed of. Rohm & Haas uses no disposal sites in Pennsylvania, because there are no adequate sites in Pennsylvania. There are only eight or ten sites in the entire country that can deal with the wastes that we produce.

William Bucciarelli, Chief, Division of Solid Waste Management, DER.

RCRA is an attempt to turn from correction of a problem to prevention. DER feels that the Act provides a firm foundation for a hazardous waste management program in Pennsylvania. Future legislation in this area in Pennsylvania should amend legislation that is already on the books; it is not necessary to start from scratch. The responsibility for the hazardous waste program should not be fragmented among many agencies, but should be concentrated in DER, and the already existing solid waste management program. DER is already trying to promote recovery of resources and waste exchange programs, and to deal with emergencies dealing with hazardous wastes.

DER would like to see Pennsylvania get the authority to administer this Act. If Pennsylvania accepts this authority, it would be under an interim authorization, so that the state could view the final guidelines of the Federal Government before deciding whether to go permanently into the program.

Thomas Scott, Esq., Killian & Gephart, PEC's Legislative Representative. I noted that the first section of the model legislation says that we do have the technology to contain waste and that it is within the economic ability of generators of waste to properly dispose of wastes. I was struck by the fact that the industry can do it, but that the government apparently does not have the money needed to force the industry to properly dispose of hazardous wastes. As environmentally concerned citizens, we must see that government does force industry to adequately treat these wastes. Citizens must be aware of budgetary problems, in addition to being aware of substantative issues that affect the environment. How can we get the most mileage out of the environmental protection dollars we spend? We need to look at the model legislation and compare it to what we have today. Many of the provisions in this Act are presently on the books in Pennsylvania. As we look at the model legislation, we must ask: Where do we need to change the present law?

There are two major problems that must be dealt with. One is the problem of responsible industries generating hazardous wastes with no proper place to dispose of them. The second is the problem of irresponsible industries, those that are not concerned about proper disposal. These industries must be policed to make sure they correct their disposal practices. Proper disposal is more expensive, but society benefits greatly. The benefits outweigh the costs.

Robert Allen, Chief, Hazardous Materials Branch, EPA, Region III. DER has done a good job in the area of solid waste management and is qualified to take on the hazardous waste management program. Pennsylvania does have some existing laws that may be useful in dealing with hazardous waste management problems. EPA's model legislation should be used as a starting point.

Edward Shuster, Newco Chemical Company, Niagra Falls, New York. There are enormous quantities of hazardous wastes being generated. I feel that the estimates made by DER and EPA are probably low. These figures do not take into account illegal dumping, spills, and accidents. In the Midwest, PCBs have been discovered in oil tanks. The presence of the PCBs makes the whole tank a hazardous waste, not just some small part of it.

The outlook is not all bad. Waste disposal will create jobs, and will allow industries to stay in this jurisdiction and develop, instead of departing for areas where more waste treatment sites are available.

Summation of Afternoon Question and Answer Period

Schramm. What grant moneys might be available to the states from the Federal Government?

Allen. Fourteen million dollars were appropriated for FY 1978. Based on its population, Pennsylvania should get $779,000. For FY 1979, the allocation will be based on several factors, including population, wastes generated, and the transportation distance to adequate treatment facilities. Pennsylvania will probably get twice as much money in FY 1979 as in FY 1978.

Schramm. What resources and personnel are necessary to administer this program in Pennsylvania?

Bucciarelli. Sixty new staff positions will be needed if Pennsylvania is to accept authority for this program. The manifest system requires many staff people to implement it properly. We will also need funds to provide training programs for employees of hazardous waste management facilities.

Schramm. Are matching funds available?

Allen. A 75-25 matching grant procedure will be used. In the discretion of the EPA Administrator, some deviations from this will be possible.

Joseph Berne (former staff person with DER). Is this program to have two phases--planning and implementation--as the solid waste program did?

Bucciarelli. Activity in this program will be in two phases. The bulk of the money for this program will go to hazardous waste programs. Whatever money is left over will go to planning.

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